

## ABSTRACT

A method for automated location dependent probabilistic tropical cyclone forecast. A plurality of new data records representative of alternative tracks are generated based on historical tracks by a first MonteCarlo-module. Points of the new data records are generated from points along the historical track by a dependent sampling process, whereas an intensity climatology is generated, based upon intensity data associated with at least some of the plurality of points along the historical tracks located within a certain grid cell. New intensity data are generated by a second MonteCarlo-module, from the intensity data associated with at least some of the plurality of points along the historical tracks by a MonteCarlo sampling process.